

Amendments to the Specification:

Please replace paragraph [0010] with the following amended paragraph:

[00010] In still another embodiment of the present invention, wherein the invention relates to a method of preventing and/or treating diabetes type 2 in a subject in need thereof, said method comprising step of administering pharmaceutically effective amount of an extract of plant ~~Pueraria~~ Pueraria tuberosa or butanol fraction of the extract or Lupinoside A4 (LPA₄), optionally along with additive(s) to the subject.

Please replace paragraph [0016] with the following amended paragraph:

[00016] In still another embodiment of the present invention, wherein the invention relates to a pharmaceutical composition useful in preventing and/or treating diabetes type 2, said composition comprising an extract of plant ~~Pueraria~~ Pueraria tuberosa or butanol fraction of the extract or Lupinoside A4 (LPA₄), and additive(s).

Please replace paragraph [0023] with the following amended paragraph:

[00023] In still another embodiment of the present invention, wherein the invention relates to a method of augmenting Glut4 phosphorylation and Glut4 translocation to a target cell membrane to enhance insulin signal in a signal transduction pathway in a subject in need thereof, said method comprising administering pharmaceutically effective amount of an extract of plant ~~Pueraria~~ Pueraria tuberosa or butanol fraction of the extract or Lupinoside A4 (LPA₄), optionally along with additive(s) to the subject.

Please replace paragraph [0041] with the following amended paragraph:

[00041] In the process of searching for anti-diabetic activity of medicinal plants of India, methanol-water (1:1) extract from ~~Pueraria~~ Pueraria tuberosa root was found to improve palmitate impairment of insulin activity in terms of 3H-2DOG uptake by 3T3L1 cells. Using Diaion HP-20 chromatography, we obtained five fractions (A-E) of which fraction E showed required activity. Fractionation of E through Sephadex LH 20 chromatography yielded 3 fractions (F-H) where F showed improvement of palmitate

induced damage. Fraction F was subsequently purified by HPLC to a single molecule, which was identified as Lupinoside PA432 by 2D NMR and mass spectrometry (Fig.3a). LPA4 protective property on the palmitate-induced impairment of insulin signaling molecules was then examined on 3T3L1 adipocytes. Fig 3b demonstrates palmitate-induced reduction of insulin augmented 3H-2-DOG uptake by adipocyte could be prevented by LPA4. Attenuating effect of palmitate on insulin-stimulated IR β tyrosine and Akt phosphorylation was waived by LPA4 (Fig. 3 c).